

I Claim:

Claim 1 (withdrawn) A method for a complete residential building inspection comprising the steps of:

- conducting an infrared scan of said residential building;
- conducting a visual inspection of said residential building; and
- conducting an acoustic scan for wood destroying insects of said residential building.

Claim 2 (withdrawn) The method of claim 1 wherein said complete residential inspection is completed in less than two hours for a residential building of up to 2,000 sq. ft.

Claim 3 (withdrawn) The method of claim 1 wherein said complete residential inspection is completed in less than four hours for a residential building of up to 4,000 sq. ft.

Claim 4 (withdrawn) A method to nondestructively inspect residential building components for a designated entity, the residential building having an inside and an outside, comprising the steps of:

- creating a temperature differential of greater than 10° F between the inside and the outside of said residential building;
- turning on substantially all light switches and substantially all exhaust blowers in said residential building;
- obtaining temperature profiles of the exterior residential building components selected from the group consisting of wall, eave, and fascia;
- assessing at least one of said temperature profiles to detect a thermal anomaly indicative of a problem with said residential building components; and
- reporting said problem to said designated entity.

Claim 5 (withdrawn) The method of claim 4 further comprising: obtaining temperature profiles of the interior surface of a pitched roof, prior to assessing at least one of said temperature profiles.

Claim 6 (withdrawn) The method of claim 4 further comprising: obtaining temperature profiles of interior residential building components, prior to assessing at least one of said temperature profiles.

Claim 7 (withdrawn) The method of claim 4 further comprising: creating sufficient air flow in a basement to facilitate evaporation and obtaining temperature profiles of a basement wall, prior to assessing at least one of said temperature profiles.

Claim 8 (withdrawn) The method of claim 4 further comprising: obtaining temperature profiles of each electrical circuit in a residential building, prior to assessing at least one of said temperature profiles.

Claim 9 (withdrawn) The method of claim 4 wherein said temperature profiles are captured by a thermal imaging camera affixed to the harness apparatus of claim 31.

Claim 10 (currently amended) A method to rapidly inspect residential building components for a designated entity comprising:

creating a temperature differential of greater than 10°F between the inside and the outside of said residential building;

turning on substantially all light switches and substantially all exhaust blowers in said residential building;

obtaining temperature profiles of the exterior residential building components selected from the group consisting of wall, eave and fascia;

obtaining temperature profiles of the interior surface of a pitched roof;

obtaining temperature profiles of the interior residential building components;

obtaining temperature profiles of each electrical circuit in a residential building;

assessing each of said temperature profiles to detect a thermal anomaly indicative of a problem with said residential building components; and

reporting a problem to said designated entity

~~wherein the time between creating a temperature differential of greater than 10°F between the inside and the outside of said residential building.~~

Claim 11 (withdrawn) The method of claim 10 further comprising: creating sufficient air flow in a basement to facilitate evaporation; and obtaining temperature profiles of a basement wall prior to assessing each of said temperature profiles.

Claim 12 (withdrawn) A method to inspect interior building components of a residential building having an inside and an outside comprising:

creating a temperature differential of greater than 10°F between the inside and the outside of said residential building;

obtaining temperature profiles of said interior building components; and

assessing each of said temperature profiles for a thermal anomaly.

Claim 13 (withdrawn) The method of claim 12 wherein said interior building components are selected from the group consisting of wall and ceiling and said thermal anomaly is indicative of an uninsulated interior building component.

Claim 14 (withdrawn) The method of claim 12 wherein one of said interior building components is a plumbing fixture and said thermal anomaly is indicative of moisture.

Claim 15 (withdrawn) The method of claim 12 wherein one of said interior building components is an air duct and said thermal anomaly is indicative of moisture in said air duct.

Claim 16 (withdrawn) The method of claim 12 wherein said interior building components is selected from the group consisting of a wall and a ceiling and said thermal anomaly is indicative of damage to insulation by small animals.

Claim 17 (withdrawn) The method of claim 12 wherein said interior building components are selected from the group consisting of a wall and a ceiling and said thermal anomaly is indicative of misaligned structural member.

Claim 18 (withdrawn) The method of claim 12 wherein said interior building components are selected from the group consisting of a wall and a ceiling and said thermal anomaly is indicative of wood destroying insects.

Claim 19 (withdrawn) The method of claim 12 wherein one of said interior building components is an air duct and said thermal anomaly is indicative of air leaking out of said air duct.

Claim 20 (withdrawn) The method of claim 12 wherein one of said interior building components

is a ceiling and said thermal anomaly is indicative of condensation.

Claim 21 (withdrawn) The method of claim 12 wherein said temperature profiles are recorded on a digital recording device.

Claim 22 (withdrawn) A method to locate the source of mold growth in a residential building having an inside and an outside comprise the steps of:

- creating a temperature differential of greater than 10° F between the inside of a residential building;

- obtaining temperature profiles of interior residential building components;

- reviewing said temperature profiles for a thermal anomaly indicative of moisture; and

- correlating moisture in said interior residential building with mold growth.

Claim 23 (withdrawn) The method of claim 22 wherein said temperature profiles are recorded on a digital recording device.

Claim 24 (withdrawn) A method to inspect a basement wall for cracks comprising:

- creating sufficient air flow in the basement to facilitate evaporation;

- obtaining temperature profiles of said basement wall; and

- assessing each of said temperature profiles for a thermal anomaly indicative of cracks in said basement wall.

Claim 25 (withdrawn) The method of claim 24 wherein said temperature profiles are recorded on a digital recording device.

Claim 26 (currently amended) A method to detect a potential electrical problem ~~with an electrical circuit~~ in a residential building comprising:

- turning on substantially all light switches in said residential building;

- turning on substantially all exhaust blowers in said residential building;

- obtaining temperature profiles of substantially all electrical outlets in said residential building; and

- assessing each of said temperature profiles for an anomaly indicative of an electrical

problem.

Claim 27 (original) The method of claim 26 wherein said electrical problem is an overload of an electrical circuit.

Claim 28 (original) The method of claim 26 wherein said electrical problem is contact surface over heat.

Claim 29 (original) The method of claim 26 wherein said electrical problem is hot electrical wire within a wall.

Claim 30 (original) The method of claim 26 wherein said temperature profiles are recorded on a digital recording device.

Claim 31 - 41 (cancelled)

Claim 42 (withdrawn) A method to inspect an exterior component of a residential building wherein said exterior residential building component is selected from the group consisting of wall, eave and fascia, comprising the steps of:

obtaining temperature profiles of the exterior residential building components during a thermal window; and

assessing each of said temperature profiles for a thermal anomaly.

Claim 43 (withdrawn) The method of claim 42 wherein said thermal anomaly is indicative of moisture.

Claim 44 (withdrawn) The method of claim 42 wherein said thermal anomaly is indicative of structural deformation.

Claim 45 (withdrawn) The method of claim 42 wherein said thermal anomaly is indicative of insect infestation.

Claim 46 (withdrawn) The method of claim 42 wherein said thermal window is after sunrise.

Claim 47 (withdrawn) The method of claim 42 wherein said thermal window is after sunset.

Claim 48 (withdrawn) The method of claim 42 wherein said thermal anomaly is indicative of a structural deformation due to the past presence of moisture.

Claim 49 (withdrawn) The method of claim 42 wherein said temperature profiles are recorded on

a digital recording device.

Claim 50 (withdrawn) A method to inspect the condition of a pitched roof of a residential building comprising:

obtaining temperature profiles of the interior surface of said pitched roof within three days of rain; and

assessing each of said temperature profiles for a thermal anomaly.

Claim 51 (withdrawn) The method of claim 50 wherein said thermal anomaly is indicative of moisture.

Claim 52 (withdrawn) The method of claim 50 wherein said thermal anomaly is indicative of structural deformation.

Claim 53 (withdrawn) The method of claim 50 wherein said temperature profiles are recorded on a digital recording device.

Claim 54 (withdrawn) A computerized method for facilitating inspection of a residential building comprising the steps of:

maintaining a database of temperature profiles for residential building components on a computer;

scanning said database for selected temperature profiles of residential building components; and

controlling a printing device to print a report showing selected temperature profiles of residential building components.

Claim 55 (withdrawn) The computerized method of claim 54 wherein said temperature profiles are input to said computer via wireless transmission means.

Claim 56 (withdrawn) The computerized method of claim 54 wherein said temperature profiles are input to said computer via nonwireless transmission means.

Claim 57 (withdrawn) The computerized method of claim 54 wherein said selected temperature profiles are for a specific residential building.

Claim 58 (withdrawn) The methods of claim 54 wherein said selected temperature profiles are

taken on different days.

Claim 59 (withdrawn) The computerized method of claim 54 wherein said temperature profiles are input to said computer via nonwireless transmission means.

Claim 60 (new) The method of claim 26 further comprising the step of measuring the temperature of substantially all electrical outlets.

Claim 61 (new) The method of claim 26 further comprising obtaining temperature profiles of dimmer switches in said residential building and assessing each of said temperature profile by determining if said dimmer switches are 30°F greater than surrounding wall temperature.

Claim 62 (new) The method of claim 26 further comprising obtaining temperature profiles of switch plates in said residential building and assessing each of said temperature profile by determining if said switch plates are 30°F greater than surrounding wall temperature.